

REMARKS

Claims 1–10, 14, 15, 19, 20, 24, 25, and 29 are pending, in which claims 1–6 were withdrawn from examination on the merits on account of the Election of Species Requirement dated February 28, 2002. No amendment has been made.

Rejections Under 35 U.S.C. § 102 in view of Murakami

Claims 7-10, 15, 20, and 25 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Murakami (U.S. Patent No. 4,264,667). Applicants respectfully traverse the rejections.

One of the novel characteristics of the claimed invention is a heat shrinkable polyester film produced from a polyester composition containing 50 weight% to 99.9 weight% of a non-elastomeric polyester and 0.1 weight% to 50 weight% of a polyester elastomer, wherein the film has several properties recited in the claims. One of these limitations addresses a shrinkage of about 10% to about 40% along its main shrinkage direction when contacted with water of 70°C for 5 seconds.

The Office Action contends that Murakami discloses a heat shrinkable polyester film with shrinkage of within 50% (column 7, lines 55 – 58) and comprising a composition identical to that of the claimed invention, and, therefore, the properties recited in the pending claims are inherent in the polyester film disclosed by Murakami. Applicants respectfully disagree. The Office Action has failed to provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent properties necessarily flow from the teachings of the applied prior art.

Murakami does not teach a polyester film that has a shrinkage of about 10% to about 40% along its main shrinkage direction when contacted with water of 70°C for 5 seconds. In column 7, lines 42-57, Murakami discloses that when a polyester film is formed and drawn, it is subjected to a heat treatment, usually at 170°C or higher, for 0.1 seconds to 30 seconds. The polyester film of Murakami is subjected to the heat treatment at a normal state, pulled

state or shrunken state. In the case where the polyester film is subjected to the heat treatment in a shrunken state, the shrunken state is a state in which the film has been shrunk preferably within 50% (column 7, lines 53-56). In other words, according to Murakami, **the shrinkage of the polyester film has already taken place before the heat treatment.** Murakami does not disclose under what condition the shrinkage rate of within 50% is achieved and in what direction the shrinkage is. Therefore, it does not disclose a heat shrinkable polyester film having the heat-shrinkage properties recited in the claims, such as a shrinkage of about 10% to about 40% along its main shrinkage direction when contacted with water of 70°C for 5 seconds.

In fact, the heat treatment of the polyester film disclosed in Murakami would result in a polyester film that would not have the properties recited in the claims. Applicants hereby submit a Declaration under 37 CFR § 1.132 signed by Hideki ITO. The Rule 132 Declaration shows the results of experiments reproducing Example 3 and Table 7 of Murakami. These results indicate that the polyester film disclosed in Murakami does not have as a shrinkage of about 10% to about 40% along its main shrinkage direction when contacted with water of 70°C for 5 seconds, a shrinkage of about 50% or more along its main shrinkage direction in water of 95°C for 5 seconds, and an adhesive retention of about 95% or more after shrinkage, as recited in independent claims 7 and 15. In fact, the polyester film of Murakami does not have any adhesive retention after shrinkage, making it a poor candidate as a commercial film. In addition, the experimental results in the Rule 132 Declaration show that the polyester film disclosed in Murakami does not have a film haze of about 3% to about 10% for a film thickness of 50μm, as recited in claim 15. Thus, Murakami cannot inherently anticipate the claimed invention.

For at least the reasons stated above, Murakami does not teach, expressly or inherently, all the limitations as recited in instant claims. Withdrawal of the rejections is respectfully requested.

Rejections under 35 U.S.C. § 103(a) over Murakami in view of Yoshinaka

Claims 14, 19, 24, and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Murakami in view of Yoshinaka et al. (U.S. Patent No. 4,996,291). Applicants respectfully traverse the rejections.

As stated above, Murakami does not teach, expressly or inherently, all the limitations as recited in the pending claims. The deficiency is not cured by Yoshinaka et al. Yoshinaka et al. discloses a heat-shrinkable polyester film (see Abstract), but Yoshinaka et al. fails to disclose a heat-shrinkable polyester film produced from a polyester composition containing 50 weight% to 99.9 weight% of a non-elastomeric polyester and 0.1 weight% to 50 weight% of a polyester elastomer, wherein the film has the properties recited in the pending claims such as a shrinkage of about 10% to about 40% along its main shrinkage direction when contacted with water of 70°C for 5 seconds. The Rule 132 Declaration shows the results of experiments reproducing Example 1 of Yoshinaka. These results indicate that the polyester film disclosed in Yoshinaka does not have a shrinkage of about 10% to about 40% along its main shrinkage direction when contacted with water of 70°C for 5 seconds.

Additionally, the films of Murakami and Yoshinaka cannot achieve the advantageous effects of the claimed invention, which has superior shrinkage uniformity. As stated in the specification, "... when the film is oriented along these two directions with a poor balance between the directions, the film may be shrunk with a poor balance between the directions, thereby resulting in a poor finish after shrinkage." (page 2, ll. 19 – 23). Murakami is silent as to shrinkage uniformity, and the films of Yoshinaka do not show superior shrinkage uniformity over both shrinkage directions. For example, Example 2 of Yoshinaka shows heat shrinkage ratios of 3.6% longitudinally and 65% transversely at a temperature of 100°C (Table 1). In contrast, greater uniformity is achieved with the films of the present invention. For example, Example 2 has a 21% longitudinal and a 64% transverse shrinkage at a temperature of 95°C (Table 1).

Further, the polyester film of Murakami does not have any adhesive retention after shrinkage, making it a poor candidate as a commercial film, such as a cap sealing label. In contrast, the claimed polyester films have high adhesive retention (see Examples 5 – 8 in

Table 2). When the film of the present invention is used as a cap sealing label, the bonded portion of the label has a high adhesive retention after shrinkage while exhibiting minimal creasing.

For at least the reasons stated above, Murakami, Yoshinaka, or the combination thereof does not teach, expressly or inherently, all the limitations as recited in instant claims. A *prima facie* case of obviousness has not been established. Withdrawal of the rejections is respectfully requested.

CONCLUSION

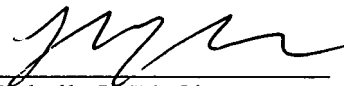
Applicants submit that the claims are allowable and an early and favorable action to that effect is respectfully requested.

The Examiner is invited to contact the undersigned to discuss any issues regarding this application.

In the event that the filing of this paper is deemed not timely, applicants petition for an appropriate extension of time. The Office is authorized to charge any underpayment or credit any overpayment to Kenyon & Kenyon LLP's Deposit Account No. 11-0600.

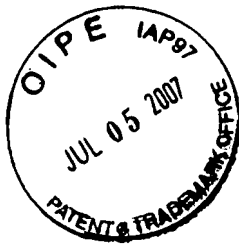
Respectfully submitted,

Date: July 5, 2006

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 09/492,173 Confirmation No. 9525
Applicants : Hideki ITO et al.
Filed : January 27, 2000
For : HEAT SHRINKABLE POLYESTER FILM
Art Unit No. : 1772
Examiner : Marc A. Patterson
Attorney Docket No. : 02298/3
Customer No. : 23838

Mail Stop Amendment
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DECLARATION UNDER 37 C.F.R. §1.132

Sir:

I, Hideki Ito, hereby declare and state:

THAT I am a citizen of Japan;

THAT I graduated from Tono High School, Gifu Prefecture, Japan in 1981;

THAT I have been employed by Toyo Boseki Kabushiki Kaisha since 1981 where I currently hold a position as Senior Researcher with responsibilities in the field of film research and development;

THAT I am one of the inventors in the above identified patent application; and

THAT I am familiar with the subject matter of the Office Action mailed June 2, 2006, and the cited references, namely Murakami (U.S. Patent No. 4,264,667) and Yoshinaka et al. (U.S. Patent No. 4,996,291).

I further declare and state that:

1. The objective of the following experiments was to repeat Example 3 of Murakami and Example 1 of Yoshinaka.
2. The polyester film according to Example 3 and Table 7 of Murakami was prepared as follows:
 - Polyethylene terephthalate and Compound 8 in Table 3 of Murakami, wherein R is a mixture of alkyl groups of an average carbon number of 15, were mixed together. The weight percent of Compound 8 (as described above) is 1% based on the total weight of all the components.
 - The mixture was melt-extruded by an extruder equipped with T-die, and then cooled with a cooling roll at 80°C to give a non-drawn film.
 - The non-drawn film was drawn 3.5 times perpendicularly at 90°C and 3.5 times laterally at 90°C, and the resultant was set by heating at 200°C for 30 seconds.
 - The film was heated-treated at 180°C for 30 minutes.
3. The polyester film according to Example 1 of Yoshinaka was prepared as follows:
 - 100 parts (by mole) of terephthalic acid, 187 parts (by mole) of ethylene glycol, 23 parts (by mole) of neopentyl glycol, and 0.05 (mole/per mole of acid component) were put into a stainless steel autoclave, where polycondensation took place by direct esterification method.
 - The resulting polyester was fusion-extruded at 300°C to give a film 180 µm thick.
 - The unstretched film was heated for 8 seconds at 130°C, and then kept at 88°C for half of the desired total stretching process, after which it was stretched along its width at 80°C, so that it became 5.2 times as long as the original length of the film.
 - After being stretched, the film was cooled to 40°C while being stretched along its width so that the stretched length of the width was about 3% of the previous width.

4. The test results of the films as prepared above are listed in the following tables:

Table 1

Test Performed	Recited in Claims 7 and 15	Example 3 of Murakami	Example 1 of Yoshinaka
shrinkage along its main shrinkage direction in water of 70°C for 5 sec	about 10% to about 40%	0%	0%
shrinkage along its main shrinkage direction in water of 95°C for 5 sec	about 50% or more	1%	67%
shrinkage along a direction perpendicular to its main shrinkage direction in water of 95°C for 5 sec	about 10% or less	0%	0%
adhesive retention after shrinkage	about 95% or more	does not have any adhesive retention	95%

Table 2

Test Performed	Recited in Claim 15	Example 3 of Murakami	Example 1 of Yoshinaka
film haze for a film thickness of 50 μ m	about 3% to about 10%	2.4%	2.3%

I, Hideki Ito, declare under penalty of perjury that the above statements are true and correct to the best of my knowledge, information, and belief. I understand that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. 1001) and may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

Dated: July 5, 2007

Hideki Ito
Hideki Ito